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Chair

Mr. Dan Ruimy

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● (1535)

[*English*]

The Chair (Mr. Dan Ruimy (Pitt Meadows—Maple Ridge, Lib.)): Welcome, everybody, to meeting 104 of the Standing Committee on Industry, Science and Technology. Today, pursuant to Standing Order 81(4), we will be reviewing the main estimates related to the Department of Industry.

Today we have with us the Honourable Kirsty Duncan, Minister of Science and Minister of Sport and Persons with Disabilities; John Knubley, Deputy Minister; and David McGovern, Associate Deputy Minister.

We're going to get right into it so we don't lose time.

Minister, you have up to 10 minutes.

Hon. Kirsty Duncan (Minister of Science and Minister of Sport and Persons with Disabilities): Mr. Chair and esteemed committee members, thank you for the opportunity to be here on the occasion of the tabling of the main estimates for the 2018-19 fiscal year.

[*Translation*]

Our government believes that the best investments we can make are in our people.

[*English*]

We believe a growing economy means investing in curiosity, creativity, and innovation. That's why, as you are no doubt aware, our government recently made the biggest investment in research in Canadian history.

[*Translation*]

We made this investment because research is the engine that drives an innovative economy.

[*English*]

That's right. Budget 2018 sets aside nearly $4 billion to support current and future scientists and researchers.

In addition to the new funding, $2.8 billion will go toward renewing federal laboratories to ensure federal scientists have the infrastructure they need to inform evidence-based decisions about our environment, our health, our communities, and our economy.

[*Translation*]

Budget 2018 represen culmination of so much work with so many partners and stakeholders. We believe these investments will encourage current researchers and inspire the next generation.

[*English*]

We want to continue to position Canada at the leading edge of discovery, discovery that improves not only the health and quality of life of Canadians, but also our environment. We want to supercharge the economy with research, enabling the discoveries that create jobs and even entirely new industries.

Take artificial intelligence, for example. Budget 2017 committed $125 million for the pan-Canadian artificial intelligence strategy. This investment is supporting hubs across the country. Industry is taking notice. Alphabet Inc., the parent company of Google, is setting up shop in Toronto, and now *The Economist* is talking about "Maple Valley", not just Silicon Valley. People around the globe are asking, "How did Canada do this?"

[*Translation*]

We also want to improve the lives of Canadians with new breakthroughs in areas like health care.

[*English*]

These investments in research will help lead to new treatments, new medicines, and better care every day for Canadians across the country. We want to build a dynamic 21st-century workforce, one that is equipped with the science, technology, engineering, and math —and I would add arts and design skills—needed to respond to future challenges and opportunities with creativity, courage, and confidence.

Let me share some details. Of the $4-billion investment I mentioned, $1.7 billion is going to support research funded through the granting councils. This includes the single largest investment in discovery research in Canada's history. This will mean better opportunities and increased support for about 21,000 researchers, students, and highly qualified personnel across Canada. That includes $210 million in new funding for our Canada research chairs program.

Already, through the Canada 150 research chairs, we have recruited 25 internationally renowned chair-holders who are making their way to Canadian universities in the coming year from Austria, Australia, France, the United States, New Zealand, South Africa, and the United Kingdom. I'm happy to say that 42% of them are Canadians, returning home because they now see a future in research here in Canada. Let me add, 58% of them are women. They are leaders in their fields, attracted to Canada by the supportive funding and the advantages that our research ecosystem offers.

● (1540)

Budget 2018 also sets aside over $1.3 billion to provide researchers across the country with access to state-of-the-art tools and facilities. This means that over 44,000 students, post-doctoral fellows, and researchers will have access to the equipment they need to carry out groundbreaking research.

I'd also like to highlight an important investment that budget 2018 makes in our world-class colleges and polytechnics. They are a critical innovation bridge between ideas and the marketplace. Through the college and community innovation program we have set aside $140 million to increase support for collaborative innovation projects involving businesses, colleges, and polytechnics. This is the largest research investment ever.

[*Translation*]

These institutions are critical to innovation. They partner with small businesses in their communities to solve real-world challenges.

[*English*]

Mr. Chair, I'd like to share a local story that illustrates this.

I recently visited the technology access centre at Niagara College. While there, I chatted with a representative of General Electric. He was happy to share that one of the main reasons the company decided to open a manufacturing facility in Welland was the technology access centre in the college. GE saw first-hand how the capabilities of the college could benefit the company. Everything it needed was there, in Welland: access to faculty and research teams; resources and equipment; and highly skilled and knowledgeable graduates in technology, trades, and business. This is huge. Today, the GE brilliant factory employs approximately 200 people.

We are making investments that strike the appropriate balance between discovery research that supports breakthroughs and the commercialization of ideas.

[*Translation*]

Mr. Chair, I'm glad to say that budget 2018 was well received by those on whom it will have the greatest impact.

[*English*]

The Universities Canada president said:

> "This budget makes important advances on the roadmap developed by the Naylor report.... It's a major investment in research that impacts Canadians' everyday lives, from shortening commute times to lifesaving medical treatments and environmental protection."

The CICan president and CEO said, "Supporting applied research is one of the most efficient ways to boost Canadian innovation."

This investment will go a long way toward unleashing the potential of colleges and institutes to drive growth in their communities and to train future innovators.

To that end, I want to emphasize that budget 2018 is about renewing Canada's research ecosystem to train the next generation of researchers. In recognition of this historic opportunity for real change, we want to ensure that Canada's next generation of researchers, including students, trainees, and early-career researchers, is larger, more diverse, and better supported than ever before. We task the granting councils with developing new plans to achieve greater equity and diversity in the sciences, and to support more early-career researchers.

We want to see our support advance the research ambitions of more women, indigenous peoples, minorities, persons with disabilities, and those at early stages in their careers. What's more, over the next year, the government will do further work to determine how to better support our next generation of researchers through scholarships and fellowships.

Mr. Chair, the government is playing the long game here.

● (1545)

[*Translation*]

This is our chance to harness the power of research to change the lives of Canadians for the better.

[*English*]

This is our chance to create a research ecosystem capable of sustaining brilliant minds and groundbreaking work.

We do all this because we want to be a global research leader and be at the forefront of discoveries that positively impact the lives of Canadians, the environment, our communities, and our economy. We are doing our part to train and support this generation of Canadian researchers so that they can help make that happen.

Thank you. I'd be pleased to answer any questions the committee members have.

The Chair: Thank you very much, Minister.

We're going to move right into questioning, with Ms. Ng for seven minutes.

Ms. Mary Ng (Markham—Thornhill, Lib.): Minister, thank you so very much for coming here today to talk to us about the great work you are doing in leading the department.

I'm going to ask a question about the government's investment in fundamental research. You talked about our government making the largest investment in Canadian history in discovery research through the granting councils. To me, this is really great news for Canadians, including the people in my riding. In my riding, we have great institutions, such as York University and Seneca College.

I wonder whether you could talk to us about the college sector. You touched on that. Maybe you can talk about the investments you're making that will help in applied research, innovative research, at the colleges, the polytechnics, and the CEGEPs.

Hon. Kirsty Duncan: Thanks, Mary, for the question.

I will begin by saying that this is the largest research investment in Canadian history. It is a $4-billion investment, and on top of that, there is $2.8 billion for government science infrastructure so our government scientists have the best labs possible to do their research.

It is a $1.7-billion investment in discovery research, $1.3 billion to the Canada Foundation for Innovation. For the first time, after 20 years, the CFI will have sustainable funding.

We are making the largest investment in college research in Canadian history as well. When you visit the colleges, as I know you have in your riding, you see that the work they're able to do, for example with business, is so important. A small or a medium-sized business comes in. They have a challenge. They're able to work on state-of-the-art infrastructure. They're able to work with students. They're able to work with faculty. They get an answer they need within a matter of months that will help grow their business and create jobs.

I'm really excited about the investments in both fundamental research and discovery research. The colleges play an enormously important role in our research ecosystem.

Ms. Mary Ng: Can you talk to us about the benefits to the students in the college system? The government is making investments to enable them to do the research, and in many colleges it will be applied research. Can you talk about its relevance to industries because of that very collaboration? What are we doing about supporting those students that would also enable the partnerships and the learning that will take place with industries?

Hon. Kirsty Duncan: Mary, thanks for the great question.

I, too, have a college in my community. It's Humber College, and I get there as often as I can. We want our students doing that applied research because that makes them very attractive to business, to industry, and to the community when they finish their degree. They're getting real-world experience. They're working on real-world problems. That makes them very attractive to industry. Research funding will give them the opportunity to work with faculty, to work on the best infrastructure, and to do their research.

● (1550)

Ms. Mary Ng: On the other side, for those organizations that collaborate so often and so well, can you talk about how the investments will actually help the industries? I think they have an opportunity here to collaborate more with the community, with the colleges, and with the post-secondary institutions in their respective areas. You used GE as an example, but maybe you could talk about other industries that have benefited from the investments that we're making for students.

Hon. Kirsty Duncan: Thanks, Mary, for the question.

Today, we have the NSERC award winners here on Parliament Hill. I think that is a really good example. The Prime Minister met with them this morning to do a round table, and there was a college researcher who has worked with industry for 10 years. His research is around removing chemicals from cleaning products. It's really exciting to celebrate these researchers on Parliament Hill.

I will also highlight the investment we've made in the National Research Council. It is $540 million, the largest investment in the National Research Council in 15 years. This is about allowing the National Research Council to go back to doing some discovery research, but also, in terms of innovation, to help small and medium-sized businesses with the problems and challenges they face.

Ms. Mary Ng: When I think about these wonderful researchers in the colleges and in the post-secondary institutions, I know that we are making a number of supports for women in the research field. Can you talk a bit about that?

Hon. Kirsty Duncan: Thanks, Mary. I am a former researcher myself. I spent 25 years fighting for more diversity in the research system. Our government understands that equity and diversity go hand in hand with excellence. We want more women, indigenous people, people from minority backgrounds, and persons with disabilities in the research system.

That is why I brought back the university and college academic staff survey. It was cancelled by the previous government after being in existence since 1937. That gives us the data. Are women and men progressing through the ranks at the same rate? Are they making equal pay?

We've put in place new equity and diversity requirements for our Canada excellence research chairs and our Canada research chairs. For the excellence research chairs, it is $10 million over seven years. During the first rollout of the program under the previous government, not one woman was nominated. During the second rollout, one woman was nominated. Today, we have 27 Canada excellence research chairs, whom we are enormously proud of—one is winning an award today—but only one of them is a woman.

The Chair: Thank you very much.

We're going to move to Mr. Jeneroux. You have seven minutes.

Mr. Matt Jeneroux (Edmonton Riverbend, CPC): Thank you, Mr. Chair.

Thank you, Minister, for being here today.

I have only seven minutes, so if you could keep your answers short, it would be appreciated. If I interrupt you, it's not my intent to cut you off; it's just that we have only seven minutes here.

You mentioned in your comments that your investments would ensure that government scientists have the best labs possible. Minister, where are the scientists?

In your last appearance before this committee, you were asked about CANSIM table 358-0146, which shows a loss of 1,571 federal personnel engaged in science and technology when the government changed over. You told this committee it was part of retirements, with no further elaboration. Do you still stand by that explanation?

Hon. Kirsty Duncan: Thank you, Matt, for the question.

One of the challenges we face is that different departments look at the numbers in different ways. It has to do with the way researchers are categorized.

That's why I am having a full-day retreat with the deputy ministers of the science-based departments in June. One of the areas I've put on the table for discussion is human resources. If the average age of a civil servant is 38, what is the average age of a government scientist? How are we attracting new Ph.D.s and post-docs into government science? How are we supporting them through their careers? It's an incredibly important area for me, and I was proud that, with my colleague from the Department of Fisheries and Oceans, one of the first things we did was hire 135 scientists.

I can't be clearer. We are committed—

● (1555)

Mr. Matt Jeneroux: Minister, I'm sorry to cut you off. I think you got your point across. The table says otherwise, though.

I have the chart here. I'd be happy to share it with you. I am especially concerned with another row in the same chart, about those engaged in research and development—direct scientists. It reads to me as if these are federal front-line researchers. In that category, there was a drop of another 2,602 personnel in research and development when the government changed over.

The 2018 numbers show that there are currently 3,507 fewer scientists employed by this government than there were in the previous government. It's difficult to believe that this is solely because of retirements. I'm happy you're having a retreat, but this is two and a half years in the making, and you now have 3,500 fewer scientists. Why?

Hon. Kirsty Duncan: That is not the case. In fact, we have gone back to the science-based departments. We have been told that it has to do with the classification of researchers.

Mr. Matt Jeneroux: After two and a half years, Minister, are the classifications still incorrect?

Hon. Kirsty Duncan: It really should be.... I will give you an example. As a result of the previous administration and the restructuring of Atomic Energy of Canada Limited, which was completed in September 2015, the scientific and professional personnel at the Canadian Nuclear Laboratories at Chalk River are no longer employed by AECL but by the Canadian National Energy Alliance. It's a private sector company. That shift is responsible for 2,873 full-time equivalents. That decision was taken by the previous government.

Mr. Matt Jeneroux: It was enacted by your government, Minister. When you have 3,507—

Hon. Kirsty Duncan: No. I have to take issue with that. That decision—

Mr. Matt Jeneroux: You have 2,800 out of 3,507. There are still missing scientists.

Hon. Kirsty Duncan: That decision was taken by the previous government—

Mr. Matt Jeneroux: Where are the missing scientists, Minister?

Hon. Kirsty Duncan: Matt, our government is committed to science, research, and evidence-based decision-making. We are committed to supporting our government scientists. We are committed to unmuzzling them. On day two of our government, we unmuzzled our scientists. We have backed that up with a new communications policy. Minister Brison and I wrote to all the ministers and the department heads to make sure they were aware of that policy change.

We know culture change takes time. We know there has been a new study done showing the improvements. The number of scientists thinking they were muzzled has gone from 90% down to 50%. There is still work to do.

Minister Brison, the president of PIPSC, and I have written a joint letter directly to our researchers to reinforce that we want them out speaking both to the media and to the public. That is a very large change from the previous government.

Mr. Matt Jeneroux: The fact is that it's actually 63% who say they are unsatisfied. You're still quoting these numbers two and a half years into your mandate.

Anyway, Minister, we will change the channel a bit here. I want to talk about the chief science adviser position. Part of the chief science adviser's mandate is to "provide and coordinate expert advice to the Minister of Science and members of Cabinet...on key scientific issues". That's directly from her mandate letter.

Your government has recently pushed through a new environmental assessment process and continues down the path of imposing a carbon tax, insisting that these are evidence-based decisions.

How many times has the chief science adviser been asked to weigh in on these or any other matters since her tenure began seven months ago?

Hon. Kirsty Duncan: As you know, Matt, I was delighted to undertake the first consultation with the research community in a decade, as well as with Parliament and with Canadians, to get a chief science adviser. That position was abolished by the previous government.

We asked what this position should look like, and it was an advisory role. We could not have a better chief science adviser than Dr. Mona Nemer—

Mr. Matt Jeneroux: I'm talking about the adviser position.

Hon. Kirsty Duncan: I'm going to answer you. For example, the member for Beauce said she was an excellent candidate. She reports directly to the Prime Minister and to me. She can also be tasked by the Prime Minister, by me, or by cabinet. It is an advisory role.

We have brought forth a new environmental assessment process after environmental legislation, I'm sorry to say, was gutted by the previous government.

● (1600)

Mr. Matt Jeneroux: Minister, I don't have much time. How many times has she been consulted?

Hon. Kirsty Duncan: After the legislation is passed on the new environmental assessment process we've put in place, there will be a review, and of course our chief science adviser will be weighing in on that.

Mr. Matt Jeneroux: She will be weighing in after the process.

The Chair: Sorry, Mr. Jeneroux, we're a little over time, but we will get back to you.

Mr. Masse, you have seven minutes.

Mr. Brian Masse (Windsor West, NDP): Thank you, Mr. Chair.

Thank you, Minister, for being here.

You mentioned the GE brilliant factory in your presentation. What type of commitment have they made in terms of investment?

Hon. Kirsty Duncan: I would have to get you the details of that. I can tell you what I know on my side. When I met them, they were really excited because of the opportunities the college offered in terms of faculty, state-of-the-art infrastructure, and the access to students who could work to solve their real-world problems. That is why we have made the investment of $140 million. That is the largest applied research investment in Canadian history.

Mr. Brian Masse: Are you aware that they're laying off 350 workers in Peterborough?

Hon. Kirsty Duncan: I cannot comment on that.

Mr. Brian Masse: This leads to my further question. There seems to be frustration for a lot of people with regard to the involvement of the private sector. On the one hand, there is an investment in the public with regard to the facility you referenced, the GE brilliant factory; on the other hand, down the road, in Peterborough, they're actively laying off 360 people and closing a factory. It becomes a little difficult.

My next question relates to what I'm hoping to see over the next year, which is some accountability. You're talking about $2.8 billion in renewing federal laboratories. What specifics can you provide right now in terms of where this is going and how we're going to ensure Canadian content for those investments? What I really want to know is what types of structures are being put in place, so that when we have this type of investment, it's not going to be absent of Canadian jobs and Canadian participation.

Hon. Kirsty Duncan: We're really excited, Brian, about this investment in federal labs, and we are just at the initial stages. I talked about this full-day retreat we have. I brought that in. This had never been done before in government, bringing together the science-based departments. Some of the things we've looked at are the age of some of the infrastructure and how research was done in these single-use labs. We want to make sure we bring together environment and health so we have a multidisciplinary perspective.

One thing that has come out of that yearly retreat is a new science infrastructure strategy. It was important to get the money in this budget for the work that's being done.

Mr. Brian Masse: I appreciate that. I guess my concern is about a lens on procurement, and that's why I'm looking for specifics. If you don't have it now, I wonder whether it's even being done. I'm also wondering about the use of small and medium-sized businesses to participate in that procurement.

I imagine that the nearly $3 billion is going across the country, and I'm looking for measurement processes in terms of that. That's what I really would like to hear.

Hon. Kirsty Duncan: I appreciate your questions. This line of questioning is really for PSPC. We are at the beginning of the process on the science side, but I do want to stress how important accountability is. In budget 2016, we announced $2 billion for research and innovation infrastructure across the country, and there was a two-year window. I want you to know how carefully we watch, so there is that accountability mechanism.

● (1605)

Mr. Brian Masse: I've had a chance to sit on other committees, and I know that procurement is a mess right now. There's no doubt about it.

I guess I'll move on to another question. The reason I used the General Electric example is that, if we just leave it to another department or another minister, there is no guarantee that there would be an actual business plan for the money to be used in procurement for the advancement of small and medium-sized business and other businesses in Canada.

I'll just leave that out there. I would hope that, as a minister, you have an interest in making sure that the procurement really is reflective of Canadians.

Hon. Kirsty Duncan: Our departments are working very closely, as are all the science-based departments, and we have the chief science adviser also feeding in to make sure we get the right infrastructure. Understand that this is bringing all these departments together. That's really new.

Mr. Brian Masse: Okay, thank you.

I will move on, then, to the pan-Canadian artificial intelligence strategy. I received a briefing with regard to the superclusters. One of the concerns I had about artificial intelligence investment was the lack of detail, at least at this point in time, about whether there would be communication and sharing with manufacturing and the other clusters.

I'm wondering whether there's going to be a connection to these investments in terms of AI across Canada, or whether they're going to be individual one-offs. I'm looking for a little more detail as to how that will work.

Hon. Kirsty Duncan: You asked first of all about the pan-Canadian artificial intelligence strategy. That was announced in budget 2017. It was $125 million to invest in artificial intelligence research. I'd like people around the table to know that Canada is really a world leader in this area. Government began funding AI in Canada in the 1980s. No one was really sure what that was, even in the late 1990s, but Canada kept investing in it.

AI is now at the tipping point, when it will affect how we work, live, and play, and Canada is really at the forefront, because of the investments in discovery research and because of the training of our researchers. The $125 million was for a corridor from Montreal through Toronto and Waterloo to Edmonton.

You're also asking about the superclusters.

Mr. Brian Masse: Is the $125 million for individual, one-off investments, or are they going to be succinctly connected in some capacity for the overall funding?

You're calling it a strategy. I'm just trying to understand that part.

The Chair: Answer very quickly, please.

Mr. John Knubley (Deputy Minister, Department of Industry): The short answer is that CIFAR is playing a role in administering the $125 million. As part of that, Alan Bernstein is very much encouraging coordination across the three centres. With respect to the superclusters, each of the three areas has proposed investments related to three of the five superclusters.

Mr. Brian Masse: Thank you.

The Chair: Mr. Baylis, go ahead, for seven minutes.

Mr. Frank Baylis (Pierrefonds—Dollard, Lib.): Thank you, Chair.

Thank you, Minister Duncan, for being here.

Since getting to know you over the last two years, I know that you have been a tireless advocate for research. You've been ringing that bell about the investments we need to make. As we're talking about the mains, I would delve a bit into the investments that you see coming.

Specifically, let's talk about infrastructure. You can't have leading research if you're using old stuff. It just can't work. Before we even talk about hiring more scientists doing anything, if they're not working on the latest infrastructure, they can't be advanced.

Can you talk specifically about the $2.8 billion that's in the estimates just for infrastructure? How do you see that impacting Canadian research in general?

Hon. Kirsty Duncan: There are two large investments in research infrastructure. One is for the universities and polytechnics, $1.3 billion through the Canada Foundation for Innovation. For the first time, after 20 years, this will now be sustainable funding. Researchers won't be wondering when the next bit of money is coming and asking themselves, "Do I apply for a grant now? Do I wait?" They've never been able to plan. They will now be able to do that. It's really exciting for the research community.

We also track where the infrastructure is across the country. Universities, colleges, and polytechnics can use it. Business can come and use it. On the government science side, we've been working with the science-based departments to develop, for the first time, a government science infrastructure strategy.

That is an investment of $2.8 billion. Many of our labs are 25 years old. It is time that they be updated. It will be exciting. Instead of one lab for one type of research, we want to bring together multiple experts so we can solve big challenges.

● (1610)

Mr. Frank Baylis: I like one of the things you mentioned, that infrastructure is not just going to be limited to federal scientists. You also mentioned businesses. Can you elaborate a bit about how that's going to help our businesses?

Hon. Kirsty Duncan: I've had several long discussions with the Canada Foundation for Innovation on this. You can go on the website and see that it actually tracks where the infrastructure is around the country. CFI is really excited about this new investment, because it will give our researchers a greater opportunity to get state-of-the-art equipment. CFI is excited for businesses, how they might be able to use it and how there might be a sharing of equipment.

Mr. Frank Baylis: There is great value in that. I've heard the same thing, Minister.

If we build this amazing new infrastructure, and we allow our businesses to co-operate with our scientists, it's not only going to help our businesses, but it's going to help that interlink that we've been studying. I'm very happy to see that our government is doing that.

Hon. Kirsty Duncan: I'll just add, Frank, that the National Research Council also plays a role here. I think I mentioned earlier that it's a $540-million investment.

Mr. Frank Baylis: I want to ask you about that.

[*Translation*]

Madam Minister, this is an important topic, not only for Canada as a whole, but also for Quebec, which uses a lot of resources for research, including the National Research Council. I know several companies that use it. This $540 million investment is extremely important.

Could you provide more details on this?

[*English*]

How is that going to help our businesses again?

Hon. Kirsty Duncan: I'm really pleased about this investment, the $540 million. It's the largest investment in the National Research Council in 15 years.

It has been described as the jewel in government research, and it plays such an important role. It does discovery research, but it also does the innovation side. It works with small businesses and medium-sized businesses. It brings together academics, business, and the government to help businesses address challenges, grow their business, and hopefully hire more people.

The way our new president Iain Stewart is looking at this is that he also wants to build stronger collaboration between the NRC, academia, and industry. In many areas, there may be an NRC facility on an academic campus, but there may be a few researchers going back and forth.

Mr. Frank Baylis: That makes that link again, which we want.

Hon. Kirsty Duncan: He wants to really strengthen that important link.

Mr. Frank Baylis: I would agree with you. We've heard that often, that the businesses have to be linked more with our researchers. That way, we can transfer the technology. I encourage that, as well.

I have only a minute left, but I'll throw back something that was brought up by my colleague and that you didn't get a chance to answer fully. It's about how sometimes full-time equivalents are reassigned, and how the numbers may look.

We have an old saying that there are lies, darned lies, and statistics. I'll let you address those statistical anomalies, if you will.

Hon. Kirsty Duncan: We researchers love statistics.

Under the previous government, AECL was to be shut down. These researchers have gone to another organization. That's one of the main reasons. The other reason is with regard to the classification.

I'm very focused on making sure that our government scientists have the funding they need to succeed, and that they have the labs and tools they need. That's one of the reasons we're bringing together the science-based departments in June, to talk about the needs of our government scientists.

● (1615)

Mr. Frank Baylis: Thank you, Minister.

The Chair: Thank you very much.

We are going to move to Mr. Jeneroux.

You have four minutes.

Mr. Matt Jeneroux: Thank you, Mr. Chair.

There's a lot to unpack in that last answer, Minister, but we'll leave that be.

You said something at this committee just a few moments ago that I think most Canadians will find shocking. You said that a chief science adviser who has now been in place for seven months would play no part in looking at the environmental assessment process of the carbon tax. I think that is shocking, but it's also very disappointing. You wouldn't look to the chief science adviser for her advice on a very scientific and evidence-based policy.

Why not, Minister?

Hon. Kirsty Duncan: I'm going to go back to the previous question you asked, Matt.

The number of federal personnel engaged in science and technology has actually increased since this government was elected.

Mr. Matt Jeneroux: Minister, we can argue—

Hon. Kirsty Duncan: If we look at 2015-16, we see that it went from 33,925 full-time equivalents to 34,484 full-time equivalents, and that's with the changes at AECL.

Mr. Matt Jeneroux: Minister, right here in your table, we see that the number of people involved in total science and technology, as well as in research and development, has gone increasingly in a downward trend since your government took over. I encourage you, Minister, to look at that CANSIM table, please.

Let's go back to the chief science adviser. I find it shocking that the chief science adviser was not part of the decision-making process. Why not?

Hon. Kirsty Duncan: I just want to finish this.

The shift of 2,873 full-time equivalents is explained by the restructuring that your previous government did around Atomic Energy of Canada Limited. These scientists are no longer employed by AECL, but by the Canadian National Energy Alliance, which is a private sector company.

Mr. Matt Jeneroux: Minister, why was the chief science adviser not consulted on the environmental assessment process?

Hon. Kirsty Duncan: As you know, we put the chief science adviser in place to make sure that government science is made fully available to Canadians, that government scientists speak freely about their work, and that scientific analyses inform decision-making. She will regularly review the methods and integrity of the science used in impact assessments and decision-making, and there will be an annual report at the end of her year to the Prime Minister and me. That will be made public.

She put out a letter after her first 100 days about the work she's been doing. She hit the ground running. She has criss-crossed the country listening to the research community, because it's about rebuilding trust and—

Mr. Matt Jeneroux: Minister, it's up to you, though, to ensure that she is consulted on legislation that's imperative to your government's success. The fact is that you haven't consulted her on it, and you said earlier that you would consult her after the fact.

Hon. Kirsty Duncan: Let me be clear. She did feed into the process for the new environmental assessment, which is—

Mr. Matt Jeneroux: You said she didn't. You said she will be doing it after the fact.

Hon. Kirsty Duncan: There will be a review as well, but she did feed into this new environment assessment process that was brought in.

With respect, Matt—

Mr. Matt Jeneroux: Did she see the redacted documents?

Hon. Kirsty Duncan: Under the previous government, environmental legislation was gutted. Fish protection was gutted, and the waterways—

Mr. Matt Jeneroux: Was the chief science adviser privy to the information, the heavily redacted documents?

Hon. Kirsty Duncan: This new environmental assessment process is focused on our environment and waterways. It's about rebuilding trust with Canadians, advancing reconciliation with indigenous peoples, and ensuring that good projects go ahead.

The Chair: Sorry, we have to move on.

Mr. Jowhari, you have three minutes.

Mr. Majid Jowhari (Richmond Hill, Lib.): Thank you, Mr. Chair.

Welcome, Minister. Let's change the topic to the digital world and the digital economy. As you know, we are moving fast in an ever-changing landscape within our world. Digital is playing a huge role.

As it relates to the $4 billion and our youth, especially women, what are the government and your department doing about the digital skill set among our youth? Specifically considering that diversity is something you are a great supporter of, how is it translating into making sure we are fully diverse within the digital skill set?

● (1620)

Hon. Kirsty Duncan: Thanks, Majid.

I know that, as an engineer, you're very interested in this area.

Mr. Majid Jowhari: Just to clarify, I'm a former engineer.

Hon. Kirsty Duncan: We've made a $50-million investment to teach young people to code. That's a really exciting program. To encourage more young people to consider a career in science, technology, engineering, and math—the STEM fields—we have the #ChooseScience campaign, which has delivered thousands of posters to thousands of schools across the country. It's a digital campaign, and it's receiving wonderful attention.

I'll build on what Mary asked earlier about what we have done to increase equity and diversity in universities. I talked about bringing back UCASS. I talked about our Canada excellence research chairs. I've also put in place new equity and diversity requirements for our Canada research chairs. We've had the universities put in place, by this past December, equity and diversity plans for how they plan to achieve the voluntary targets they agreed to in 2006 for women, indigenous people, people of minority backgrounds, and persons with disabilities. I've been clear that if they don't make their targets, I will consider withholding peer review.

I'd like to tell you that we're having real success with this. With our Canada 150 chairs, we were able to attract 42% expat Canadians, 58% women, back to Canada because they saw the research future here. That is a real difference, a real achievement, and it's measurable.

Mr. Majid Jowhari: Thank you.

The Chair: Thank you very much.

We're going to move back to Mr. Jeneroux. You have three minutes.

Mr. Matt Jeneroux: Thank you, Mr. Chair.

Minister, while in opposition, you were a vocal advocate of a controversial CCSVI treatment. Its founder, Dr. Zamboni, claims that it improves the lives of patients with MS by widening their veins to allow for better blood circulation to the brain. You presented Bill C-280 in support of a national CCSVI strategy and claimed to have attended seven conferences on CCSVI, presented at three, and spent close to 100 hours reviewing MRIs and watching the procedure.

A study was recently done at UBC on this treatment. The lead neurologist, Dr. Traboulsee, concluded that there was absolutely no difference—no smidgen of a difference—between the group treated with the CCSVI treatment and the group treated with placebos. In light of this study, and in light of the fact that you're now science minister, has your opinion on CCSVI changed?

Hon. Kirsty Duncan: Matt, I thank you for the question.

In the last Parliament, I asked that the previous government do the science. I asked that it collect the evidence. I asked for clinical trials and for a registry for MS. The government reversed its position, agreed to do clinical trials, and agreed to do the registry. As you say, the results have been put forth, but what I asked for was that the government do the science.

Mr. Matt Jeneroux: Has your opinion on CCSVI changed?

Hon. Kirsty Duncan: We are a government that is committed to science and evidence-based decision-making.

Mr. Matt Jeneroux: I am sure there are many scientists who have been waiting for a long time to hear that answer from you, Minister.

Hon. Kirsty Duncan: The scientific community, Matt, is absolutely thrilled with the Canadian historic record investment in research: $4 billion in research, plus $2.8 billion for science infrastructure, which the largest investment; the largest investment in discovery research, $1.7 billion; the largest investment, and now sustainable funding, for science infrastructure, $1.3 billion; the largest investment in the NRC in 15 years, as well as the largest investment—

● (1625)

Mr. Matt Jeneroux: I have 45 seconds left, so could I just get to my last question, Minister? Then I promise you'll be off the hot seat for a minute.

Hon. Kirsty Duncan: —in application research in Canadian history. I think the research community is very thrilled.

Mr. Matt Jeneroux: In your department's response to an order paper question submitted by my colleague, it was revealed that your department had awarded a contract of $51,000 and change to BESC Ottawa for headhunting services related to the chief science adviser position. How many candidates did BESC submit for review, and which departments, offices, and individuals were involved in the selection process?

Hon. Kirsty Duncan: Matt, I'd have to come back to you with the details. What I can tell you is that it was a rigorous process over about six months. We advertised the position widely. Numerous people were interviewed. We wanted to get the best candidate. As your colleague, the member for Beauce, said, she is an excellent candidate, and her appointment has been lauded across the country.

The Chair: Thank you very much.

We going to move right to Mr. Sheehan. You have three minutes.

Mr. Terry Sheehan (Sault Ste. Marie, Lib.): Minister, thank you for your presentation. You do great work, especially around the research chairs. I know that even little old Sault Ste. Marie has reached out to apply for one, for a plant lipid metabolism research project, and they're very confident in their application. I am really glad to see that the program is reaching out to the smaller areas of Canada where great research is being done.

What I'm really interested in, as well, is that in 2006 it took a legal settlement to change the program to create hiring targets for four groups: women, indigenous people, people with disabilities, and visible minorities. I read an article about that in the fall. It talked about how there hadn't been much movement for a decade, but then you implemented term limits and it was changing. That was last year. I congratulate you on that.

I want to ask about 2018. What's in the budget to increase equity in science and research?

Hon. Kirsty Duncan: Thanks, Terry, for the question. I know this matters so much to you because of your daughter.

Mr. Terry Sheehan: Yes, it does, very much.

Hon. Kirsty Duncan: You've asked a lot about this. I'll answer very briefly. We've brought back the UCASS survey. We've put in place equity and diversity requirements for our Canada excellence research chairs and our Canada research chairs, and we want to do more. We're going to put in place the well-known, well-respected Athena SWAN program. There was $15 million in the budget to put this in place, and we're looking forward to moving forward with it so that we have equity and diversity at our institutions.

Mr. Terry Sheehan: That's excellent.

You also had talked about how, in delving into a lot more about truth and reconciliation, science research can be a part of that, and again, I go back to Algoma University. It was a former residential school. I toured it recently. I saw the research. They're applying for research chairs, but they're also trying to involve indigenous components. Can you comment on what you see going forward, and how that might happen?

The Chair: Sorry, you'll have to keep it tight. You have 30 seconds.

Hon. Kirsty Duncan: Terry, thank you for asking this.

We're doing it in government science. We've been working on how we bring western science and ways of knowing together, how do we include ways of knowing. Then in this budget, we received $3.8 million for the granting councils to work with indigenous peoples to develop a research strategy that will better support our Inuit, Métis, our first nations researchers.

The Chair: Thank you very much.

Mr. Masse, take us home for the final two minutes, please.

Mr. Brian Masse: Thank you.

Thank you, Madam Minister.

Again, one of the things I'd like to talk about is Canada catching up with the world with regard to medical testing using animals. There's a growing body of evidence that 95% of those that have used animal testing for drugs have not led to successful rates. There are questions as to how efficient the drug testing is and whether or not Canada's scientific community should play a role in pushing non-animal testing. How do you feel about having a centre for alternatives to animal testing?

Have you considered, and are there currently any plans to look at how we can be innovators and advance that issue, or is the government not interested in that right now?

● (1630)

Hon. Kirsty Duncan: I'm well aware of the research you mentioned from the University of Windsor. It's where I used to teach. I think we've talked about this before. I think other members of Parliament have asked about this. As you know the way things work in research is that there's a peer-review process. Canada has a world-renowned peer-review process, and the researchers could apply for different areas.

I'm pleased to tell you we have a 25% increase to the granting councils in this budget. It's going to open up new areas. There's $275 million for a new multidisciplinary, multinational risky research fund. There's $210 million for Canada research chairs, so with this large investment, there are many more opportunities for our researchers. What we saw in the past, and what we were hearing from the granting councils, was that there was good research, but it couldn't get funded. There simply wasn't the money. Now because there is the money, that research will get funded and I can't wait to see what our researchers do next. I think they're going to undertake research we can't even begin to imagine.

The Chair: On that note, we are done.

Thank you very much, Minister, for being here with us today.

We are going to suspend for a very quick two minutes while we change the players around. Then we'll come back.

Thank you.

● _____ (Pause) _____

●

● (1635)

The Chair: Welcome back, everybody.

We are going to continue for the second hour. We have the Honourable Navdeep Bains, Minister of Innovation, Science and Economic Development, as well as John Knubley, Deputy Minister.

We want to make sure that we get all the time we can, so Minister, you have up to 10 minutes.

Hon. Navdeep Bains (Minister of Innovation, Science and Economic Development): Thank you very much, Chair.

It's great to be back. It's great to see a lot of familiar faces, some new faces as well.

Thank you very much for this opportunity.

[*Translation*]

I appreciate the opportunity to meet with you on the occasion of the tabling of the 2018-19 main estimates.

[*English*]

It is my intention to share with this committee the details of the continued implementation of our government's innovation and skills plan, which we've discussed in several of our budgets.

Chair, my comments will be brief to allow maximum time for questions. I know you said up to 10 minutes, but I will do my best to take less than that so we have a fulsome discussion.

However, before I do that, I'd like to thank this committee once again for its report on intellectual property and technology transfer. As you saw last week, when I announced our government's first national IP strategy, which is a huge point of pride, it reflected the recommendations, and you were instrumental in driving those initiatives home. I thank you for your leadership.

[*Translation*]

I would be happy to discuss our strategy in more detail during the Q&A session.

[*English*]

As for our innovation and skills plan, it is already providing a better life for middle-class Canadians from coast to coast to coast. We are well on our way to accomplishing our goals. Our economy has been growing at a rate of more than 3%, so GDP is doing really well relative to previous decades.

[*Translation*]

Our economy is the fastest growing economy in the G7.

[*English*]

But we can't be complacent. We must continue to make investments. We need to be strategic, we need to be smart, and we need to be thoughtful. From day one, jobs have been a priority for me and for our government.

[*Translation*]

Since we formed the government, in 2015, the Canadian economy has seen more than 600,000 jobs created. Our unemployment rate right now is at 5.8%, so clearly we're headed in the right direction.

[*English*]

Naturally, we want to continue to build on that momentum. That's why I'm here today to discuss the proposed budget allocation of $7.8 billion in the 2018-19 time period across the ISED portfolio and to answer any questions you may have. In doing so, I am seeking approval for spending to continue advancing our government's innovation and skills plan—again, it's a multi-year plan—including the priorities announced in budget 2017.

One of the centrepieces of our innovation and skills plan that received funding, or that was allocated in the 2017 budget, was the supercluster initiative. In February we revealed the five successful proposals that link together business, academia, and non-profit society to come together to supercharge our economy. The framework for partnership is there. Now it's up to innovators to bring those partners together and put their plans into action, and I look forward to seeing what each supercluster does in the coming months and years.

[*Translation*]

The strategic innovation fund, which was also announced in budget 2017, is another tool intended to stimulate innovation.

[*English*]

This fund will help Canadian innovators build in areas of economic strength, expand the role of Canadian firms and regional and global supply chains, attract investments, and create new, good-quality middle-class jobs.

Since its launch in 2017, Canada's innovative industries have responded positively to the strategic innovation fund. For example, hundreds of applications have been received through this new single-window program. We will put departmental resources to good use to allow SIF, the strategic innovation fund, to accelerate technology transfer and commercialization in sectors ranging from aerospace, defence, and automotive to agri-food and clean tech. Really, again, it's to diversify our economy and to look at the areas of high growth.

[*Translation*]

I'd like to highlight a couple of other important measures that are ensuring Canada's place in the digital economy.

[*English*]

I'm referring to the CanCode and connect to innovate initiatives. Through CanCode, we're teaching coding and other digital skills, and this is really a point of pride for me as a father of two young girls. One million kids from kindergarten to grade 12 will learn how to code in the next two years, and we will also help train more than 60,000 teachers on how to incorporate new technology in the classroom.

● (1640)

Of course, none of this is possible without access to high-speed Internet service. That's why we are funding the connect to innovate program, which helps bridge the digital divide in rural and remote communities across Canada. This is a matter of fairness and a matter of equality. This is a really essential part in the new digital economy.

Canada's success in the digital economy also depends on leveraging our diverse talent and providing opportunities for all to participate in investing in digital skills, and infrastructure, we believe, will help achieve this.

Finally, among the many 2017 measures I'm talking about here today, let me draw your attention to the innovative solutions Canada program. Under this program, 20 federal departments and agencies will challenge small and medium-sized Canadian companies to solve real departmental problems. These are challenges the government is facing. They're going to go out and put them out in a very open and transparent way. This program will support the scale-up and growth of Canada's innovators and entrepreneurs by having the federal government act as a first customer, to be that marquee customer.

In return, the government will have access to the latest and most innovative products and services. This is aimed squarely at innovators, and we are confident it will help smaller companies become successful global players as well.

[*Translation*]

Our government's investments under the innovation and skills plan ensure that Canada will sustain its leadership position as one of the world's best places to live and to do business.

[*English*]

They will help sustain a world-class workforce in cutting-edge infrastructure, and they will attract investment and opportunities from around the world.

Once again, I thank this esteemed committee for this opportunity to speak and share some of my thoughts, and I look forward to any questions you may have.

Thank you very much.

The Chair: Thank you very much, Minister.

We're going to move right to Ms. Ng. You have seven minutes.

Ms. Mary Ng: Minister, it is so wonderful to have you here to talk to us about the investments being made in innovation, as part of the estimates process.

I want to talk about the innovation superclusters initiative. There's a particular one that's a bit close to me. That's the advanced manufacturing supercluster. That bid was done out of the area I represent, and it included a lot of partners. It included the City of Markham, the Regional Municipality of York, ventureLAB, York University, Seneca College, and many industry partners such as Celestica, Magna, Canvass Analytics, Peytec, SterileCare, and ChipCare. I'm really pleased that their bid was successful and they will receive funding through the advanced manufacturing supercluster.

It really does represent a wonderful economic opportunity because of the concentration of companies that are here, from start-ups to scale-ups to SMEs to multinationals. They work and operate in a place that really is an ecosystem.

With that, could you talk to us about the superclusters? I've just highlighted the one, but can you talk to us about the five superclusters, how they were chosen, and the government investment in the superclusters initiative?

Hon. Navdeep Bains: Thank you very much for your question and your leadership in this area. I know Markham is really a hub of innovation. There are a lot of great companies there, and many of them are participating in this particular initiative, as you mentioned, in the supercluster initiative, the advanced manufacturing one, more specifically.

Now, just to take a step back, we decided as a government that we wanted to unlock more money for research and development. We wanted better quality jobs. We wanted to see more economic growth. We decided that, rather than being prescriptive, we would create an open and transparent process led by businesses. The idea was that they would put forward competitive bids and proposals and ideas of how they'd work with smaller companies, large companies, academic institutions, and not-for-profits, to get us those desired outcomes.

Again, if someone asks me what a supercluster is, I'll say it's a job magnet. It's really about good-quality jobs. It's creating an ecosystem. Also as you mentioned, this was a very competitive process, and ultimately, we selected five. We avoided what we call the "peanut butter" approach. We wanted to be very strategic, we wanted to be very deliberate, and we wanted to have impact.

By selecting up to five—we determined five ultimately based on the criteria—we felt this would allow them to really compete, not only within Canada but globally as well. We have the digital supercluster out of British Columbia, one out of the Prairie provinces around protein and adding value to protein products, obviously the advanced manufacturing initiative that you talked about in Ontario, the artificial intelligence supply chain initiative, and then, of course, the oceans supercluster in the Atlantic Canada region.

This represents the fact that innovation takes place across the country, but fundamentally, the key metrics and take-aways are that this, at minimum, would generate billions of dollars of economic activity and tens of thousands of jobs over the coming years. This has been validated by third party experts. We also engaged government experts. We also had an expert panel, so we're very confident that this is an economic policy that will give us those desired outcomes.

Specifically in advanced manufacturing, it's about platforms. How can additive manufacturing—3-D printing, for example—and robotics help so many different aspects of our economy? It's not focused on aero or auto exclusively. These platforms like artificial intelligence or digital platforms, for instance, have a profound impact across the entire economy. I would say we have to be careful that this isn't a regional strategy. This is really about platforms that are going to be deployed and benefit the entire Canadian economy from coast to coast to coast.

● (1645)

Ms. Mary Ng: That's great.

Can you talk to us about the—

The Chair: Sorry, can I just jump in for one moment, please?

Is there somebody playing music on this side? We're hearing music. It's interfering, and we've had a couple of complaints already, so please stop. Thank you.

You can go ahead.

Ms. Mary Ng: Can you talk to us about the investment dollars in superclusters?

Hon. Navdeep Bains: It's a significant investment. It's $950 million. We wanted to get, at minimum, dollar-for-dollar leverage out of the private sector. I can tell you that the private sector has stepped up in a big way. They exceeded that expectation with more than a dollar-for-dollar investment. The investment is well over $2 billion, from government but also from, more importantly, the private sector.

As I mentioned earlier, the objective is to unlock cash on balance sheets for more research and development. If we want our companies to succeed and grow, they need to bet on new emerging technology, on new solutions. They need to think five, 10, and 15 years down the road. We feel that we've created not only that incentive but also that ecosystem. It's really about helping the small businesses scale up as well. This isn't a play about big businesses. This is really about the ecosystem that would benefit a lot of start-ups and companies that are scaling up.

For us, if you look at our innovation and skills plan, that's really our focus: How can we help Canadian companies scale and grow? Our ambition is not only Canada. We also have global ambition. We want these companies to succeed internationally as well. That's why we made such a significant investment of $950 million.

Ms. Mary Ng: Thank you.

I'll switch this up a little bit and talk about the innovative solutions Canada program. Thank you for sharing with us the budget investments in innovative solutions Canada. It's great, because the government being the first customer for a lot of start-ups is something that will give these start-ups the leg they need for greater access into the marketplace, particularly if the government becomes their first customer.

Can you talk to us about how the innovative solutions Canada program might support under-represented groups? We have a lot of start-ups that cover that waterfront. How is the government going to help there?

Hon. Navdeep Bains: This is a program designed to help companies scale up. It's government acting as a marquee customer, making a bet on emerging Canadian technology, and validating that technology, so that when they go abroad, particularly as companies of diverse backgrounds, they can succeed not only in Canada but globally as well.

Hopefully, in the next round we'll get a chance to elaborate on that.

The Chair: Thank you very much.

We'll move on to Ms. Rempel.

You have seven minutes.

Hon. Michelle Rempel (Calgary Nose Hill, CPC): Thank you, Mr. Chair.

Minister, for the period covered by these estimates, what's the total amount of direct grants and contributions made to for-profit enterprises by all of the departments within your signing authority?

Hon. Navdeep Bains: Based on the amounts we have here in the 2018-19 estimates, the total portfolio amount is $7.8 billion. Are you specifically looking for grants?

Hon. Michelle Rempel: Grants and contributions made to for-profit enterprises.

Hon. Navdeep Bains: Not the companies that are non-profit, but the for-profit.

● (1650)

Hon. Michelle Rempel: Right.

Hon. Navdeep Bains: Okay. I'll get you that specifically. We have different grants within different portfolios. I'll get you that sum momentarily.

Hon. Michelle Rempel: Okay.

Of that number, how much went to female-led businesses?

Hon. Navdeep Bains: Again, I will have to get you that number momentarily.

Hon. Michelle Rempel: How much went to non-Canadian-owned businesses?

Hon. Navdeep Bains: Again, we'll have to get you that number. We'll definitely break that information out.

Are you looking for international investments and domestic investments?

Hon. Michelle Rempel: I'm trying to figure out how much money you directly gave to companies.

Hon. Navdeep Bains: Again, we'll get the exact amount.

We have different ways. It's primarily through grants and loans as repayable contributions. Those are the two mechanisms that we have.

Hon. Michelle Rempel: Sure. I mean, some of the budgetary figures we've seen are $372 million for Bombardier and $35 billion for the Infrastructure Bank.

Hon. Navdeep Bains: Correct.

Hon. Michelle Rempel: I just would like to know how much money, since we're at the main estimates, you've given to companies.

Hon. Navdeep Bains: In the main estimates there are two components. There's an operating component to the main estimates, which is the baseline for personnel—

Hon. Michelle Rempel: Yes, I know. I realize that.

Hon. Navdeep Bains: There's also the grants and contributions component.

We'll get those for you.

Hon. Michelle Rempel: How much in grants and contributions did you give to for-profit enterprises, including all of the sub-departments?

Hon. Navdeep Bains: It's a great question. We'll get that to you momentarily. I'll just ask my officials to get that number for me.

Hon. Michelle Rempel: Mr. Knubley, do you know what that amount is?

Mr. John Knubley: No. We'll get back to you with the exact number.

Hon. Michelle Rempel: We're at the main estimates. I wanted to know how much money you're giving to companies because I was going to ask you how many jobs you've created from that money.

Hon. Navdeep Bains: Again, just to—

Hon. Michelle Rempel: I'll give Mr. Knubley a moment.

Hon. Navdeep Bains: Sure.

Mr. John Knubley: I think of the voted activities, which is $2.3 billion in total, 80% are grants, as I understand it.

Hon. Michelle Rempel: To for-profit enterprises...?

Mr. John Knubley: They're not all for-profit. We would have to clarify that because it's not broken into that detail.

Hon. Michelle Rempel: How much money are you giving to companies?

Mr. John Knubley: I can't answer that question. As we indicated, we'll have to come back to you with that.

Hon. Michelle Rempel: But why? I mean, these are the main estimates, right?

Mr. John Knubley: These are the main estimates, and the way it is broken out is as follows in terms of the way it has been done, and it's done by program.

Hon. Michelle Rempel: Right. Okay, but the whole argument—

Mr. John Knubley: If you want the totals, then we will have to come back to you with the totals.

Hon. Michelle Rempel: The whole argument that has been made with the superclusters and this and that is that if we give money to companies, there will be jobs created. What I'm trying to do is figure out, as a parliamentarian at the main estimates, how much money you've given to companies and how many jobs have been created. Can you tell me how much you've given to companies?

Hon. Navdeep Bains: If I may, as I indicated, the total amount for the portfolio is $7.8 billion, of which we will siphon off and determine exactly the amount that you're requesting, and we'll make sure we provide you with the job numbers.

Hon. Michelle Rempel: Okay. I'm just wondering why that's not possible today given that you—

Hon. Navdeep Bains: It's not possible today. We're just getting that information.

We'll definitely get back to you.

Hon. Michelle Rempel: By the end of my question round...?

Hon. Navdeep Bains: As soon as possible.

The Chair: However long it takes them.

Hon. Michelle Rempel: Okay. I'm sort of surprised. It's the industry committee, and your department has a lot of grants and contributions that you've talked about, but we don't know how much is going to companies at all or...?

Hon. Navdeep Bains: We do know. We're just getting the accurate number for you.

Hon. Michelle Rempel: Okay.

Mr. Knubley, do you have that number?

Mr. John Knubley: No, I do not.

What the main estimates show tends to be the actual changes in the funding related to the program in terms of budget 2017 and budget 2018—

Hon. Michelle Rempel: How can you manage—

Mr. John Knubley: —so in new funding spending from budget 2017 totalling $568.5 million—

Hon. Michelle Rempel: I can't—

Mr. John Knubley: —the innovation superclusters was increased to $149.3 million.

Hon. Michelle Rempel: I don't have enough time—

Mr. John Knubley: The strategic innovation fund was increased $99.3 million—

Hon. Michelle Rempel: The question I wanted to ask was that you're spending a lot of Canadian tax dollars on companies, so how many jobs were created? But I can't get to that, so I'll ask, because I know a lot of this has gone to companies like Bombardier and your government has said that it is going to be entering into some sort of unknown financial agreement with Kinder Morgan for the pipeline.... I'm wondering if you have allocated anything in these mains for whatever sort of corporate subsidy you plan to give to a pipeline that was prepared to be built with no public subsidy.

Or do you not know that either?

Mr. John Knubley: There are issues in terms of disclosure. What we do provide to all Canadians on a regular basis is that we publish investments made in companies and the total amount of investment. We do this on an aggregate basis—

Hon. Michelle Rempel: How about Kinder Morgan? The Kinder Morgan—

Mr. John Knubley: No, because the issue is that there's confidentiality with respect to individual firms, so all that we actually release—

Hon. Navdeep Bains: With respect to Kinder Morgan, as you know, right now we're looking at our financial and legislative options, so in the estimates you will not find any allocation for that.

● (1655)

Hon. Michelle Rempel: We don't know how much money you've given to companies so far—

Hon. Navdeep Bains: No, we're just going to get you the accurate number.

Hon. Michelle Rempel: Okay. Do you have it yet?

Hon. Navdeep Bains: We're going to get that to you momentarily.

Hon. Michelle Rempel: Well, you're just sitting there.

Hon. Navdeep Bains: Yes, our official is making sure that we get you the correct number.

Hon. Michelle Rempel: So we don't know how much money you've spent on companies.

Hon. Navdeep Bains: No, we do have the number. We're getting you that number.

Hon. Michelle Rempel: Why can't I just have that right now?

Hon. Navdeep Bains: You asked, and I appreciate your patience. I'd ask you to endeavour to be a bit more patient. We'll definitely get you that information. I just want to clarify the record: we do have that number. We'll get you that number.

Hon. Michelle Rempel: To clarify, you as the minister, in charge of signing off on this, don't know how much money you've spent on companies.

Hon. Navdeep Bains: No, I do know.

Hon. Michelle Rempel: Then what is it?

Hon. Navdeep Bains: You asked for a specific number, and we'll get you that number momentarily.

Hon. Michelle Rempel: What about you, Mr. Knubley? You're in charge of this as well.

Hon. Navdeep Bains: It's the same answer. It hasn't changed in the last three seconds.

Hon. Michelle Rempel: I guess, you know, trying to figure out how many jobs have been created—

Hon. Navdeep Bains: We'll get you that information as well, absolutely. We'll get you the contributions and the jobs associated with that as well.

Hon. Michelle Rempel: So we don't know how much you're going to be spending on...?

Hon. Navdeep Bains: We do know. We're just getting that information.

Hon. Michelle Rempel: What about in Kinder Morgan? That's not in the budget at all right now.

Hon. Navdeep Bains: As we mentioned, these are estimates, and they primarily reflect approved Treasury Board submissions since December of 2017. Therefore, there's no provision in this for Kinder Morgan.

Hon. Michelle Rempel: I'm at the end of my time, I think. Do we have an answer to that?

Hon. Navdeep Bains: We'll get you that momentarily.

Hon. Michelle Rempel: But I'm out of time.

Hon. Navdeep Bains: That's okay. It's an hour-long committee. We'll definitely get that to you soon.

The Chair: Thank you very much.

We're going to move to you, Mr. Masse. You have seven minutes.

Mr. Brian Masse: Thank you, Mr. Chair. I think I'll move onto something more exciting.

In terms of gas pricing, is there any money allocated for increases either to the Competition Bureau or for support to actually fund a petroleum monitoring agency or an office of an oil and gas ombudsman? I've asked this question in the House of Commons before. The issue—I don't want to get into debating the pricing of gasoline and a series of things—is that I'm looking for more consumer accountability and transparency. Is there anything for Canadians in these estimates to allow for that?

Hon. Navdeep Bains: Unfortunately, there's no new money allocated in these estimates.

Mr. Brian Masse: I'm disappointed to hear that because I've been hoping there would be at least be something of the nature of even augmenting the Competition Bureau, but I'll set that aside.

I want to move to what we're hearing are concerns with regard to our hearings on copyright right now. It is a mess with regard to the Copyright Board of Canada in terms of the expression that we're hearing from interested parties on both sides. There have been some hearings and some submissions made.

Are there any allocated funds or improvements for making sure that Copyright Board of Canada decisions move quicker and we have decisions in a more timely manner?

Hon. Navdeep Bains: That's a great question. Copyright Board reform is important to us. We want to make sure there's an efficient, transparent, and predictable Copyright Board. We are going to be bringing forward changes to reflect the issues that you've raised. We feel this is something that industry wants.

More importantly, for example, if you look at the national IP strategy that we announced last week, there are some legislative changes to the "notice and notice" regime as well to make it easier for consumers. You mentioned, as well, the 85 year-old lady who received a notice to pay an up to $5,000 fine. We think that's unacceptable so we're going to be bringing you some of those changes as well. There will be some changes to the board reform as well to make it more transparent and to deal with the issues in a more timely manner. Some legislative changes will be proposed as well to deal with issues like notice and notice.

Mr. Brian Masse: I would like to quickly follow up on that.

One of the concerns that I've expressed during our review of copyright—which we're doing right now—is, even if we present whatever report, whether there will be time for a quick turnaround and also changes. There's no doubt that the Copyright Board's time frame of decision-making seems to be perhaps impeded by resources. I just wanted to note that.

Now that we have Mr. Knubley back, you might be part of this answer because it follows up with regard to the new window that you have. I've expressed concerns in the past about the strategic innovation fund, not because of the fund itself but because we had an independent auto fund. It was different for aerospace but now it's the one-shop window.

Can you provide any numbers in terms of percentages of where the funding is going? My concern has always been a siphoning, perhaps, from the auto sector. What can you report at this point?

● (1700)

Hon. Navdeep Bains: The overall fund amount is $1.26 billion. This is really a reflection of the SADI fund that you referred to for the aerospace sector and the automotive innovation fund that existed. They've been consolidated and we added new resources as well.

We just started to announce some programming in projects under the SIF that go beyond aero and auto. I would say that auto is in a strong position. One of the key announcements we made was on Linamar, for example. That was the first announcement we made. There we announced a 1,500 job contribution. It's still too early to say because there's a competitive process and we're looking at a range of different proposals that are coming forward. The automotive sector has done well historically and we're confident it will do well going forward because we're looking for significant capital investments as well. It's still in early stages, as you know. This was just announced and we've just rolled out a few projects and there are many more to come.

Mr. Brian Masse: We can pick them apart individually but will there be a compartmentalization of the types of industries that will be accessing this fund, or is it just going to be a long list?

Hon. Navdeep Bains: We can prepare it in a manner that would be helpful to you and others if you want it broken out by sectors. Ultimately, we're going to list the different projects. For some of those projects, it's interesting, it's not necessarily auto but auto and aero working together. It is sometimes based on R and D to help multiple platforms that deal with multiple sectors. We can do our best to categorize them. If you're thinking of the car of the future, I am too. It's a huge concern of ours and a preoccupation because we want to see the long-term success of the automotive industry. We're looking at the role of AI, clean tech, autonomous vehicles, and making sure that we make those strategic investments. We're very mindful of that in the strategic innovation fund to set ourselves up for success, not only in mandates right now but also in mandates 10 or 15 years from now.

Mr. Brian Masse: I will move on to another issue.

We've just issued a report as a committee on rural broadband. Is there any comment you wish to provide right now? Obviously, we are receiving a lot of attention about this from not only constituents but also companies in the field. Do you want to use this opportunity of one minute to comment about the fact that we've submitted the report right now?

Hon. Navdeep Bains: First of all, thank you.

As I mentioned, on the intellectual property report, your feedback and guidance were extremely helpful as we articulated the government's first national IP strategy. In the new knowledge economy, it was long overdue.

With respect to investments in high-speed Internet connectivity in rural and remote communities, that's still a priority for our government. That's why we introduced—and it's in the estimates as well—the connect to innovate program. This is a $500-million program to provide that fibre backbone infrastructure.

The neat attribute about this program is that it actually leverages private sector funding. Overall investment will be over a billion dollars. It will help over 700 communities, including really remote and rural communities, but we're looking to build upon that. We announced for example, LEOs, low Earth orbit satellite technologies, that can help, again, those rural and remote communities to deal with the latency issue.

We're looking at technology. We're looking at traditional funding in fibre. We're looking at partnerships with the private sector. We've also been working very closely with the provinces and territories to make sure that we have better program alignment to maximize those opportunities as well. It continues to be an important issue that our caucus raises. We'll continue to make those investments.

Mr. Brian Masse: When will you respond to the report though?

Hon. Navdeep Bains: It will be in a timely manner. We'll look at it, review it, and get back in a timely manner.

The Chair: Thank you.

We're going to move on to Mr. Jowhari.

You have seven minutes.

I would just remind everybody that we're very tight on time, so let's keep it tight.

Mr. Majid Jowhari: Thank you, Mr. Chair. I'll be sharing my time with Mr. Sheehan.

Welcome, Minister.

I want to go back to the discussion that Mr. Masse started around the strategic innovation fund. In your opening remarks you said that since its launch in 2017, Canada's innovation industry has responded positively to the strategic innovation fund. You highlighted one or two of the areas where the funding has been announced. Can you also touch on the benefits this has brought into the government's innovation agenda?

Hon. Navdeep Bains: Which particular program are you alluding to?

Mr. Majid Jowhari: The strategic innovation fund.

Hon. Navdeep Bains: This fund is really designed with multiple objectives. First of all, we really want to bet on early-stage R and D. One of the challenges we see for us in Canada is that our businesses are 22nd out of 34 OECD countries when it comes to investments in R and D. We can and must do better. There's a sense of complacency. There are also just challenges in the environment here where risk aversion exists.

We're trying to unlock the record cash that's on balance sheets right now and see how we can invest in R and D. One of the key objectives of the strategic innovation fund is to develop that partnership not only with the private sector but with academia and small businesses as well to unlock some of that money.

The other aspect of this is to look at some key emerging technologies. For example, we just did an encore announcement. This is really about 5G and creating the 5G bed, this platform on which small businesses can come and test out their ideas, their solutions, their technologies. The larger companies have put money in too. So have the Province of Ontario, the federal government, and Quebec. This is, again, an area where emerging technologies can really flourish.

We're really focusing on unlocking new monies but also on investing in key strategic areas where there's high growth. Especially with 5G, with the Internet of things, there are enormous opportunities there. It plays a big role in autonomous vehicles as well. The connected vehicle is a key component of that. Hence the name—the strategic innovation fund. We're being very strategic, but again, we're not prescribing what these partnerships should look like. The onus is really on businesses. These are initiatives led by businesses working very closely with academia and smaller businesses in particular to come forward with ideas to invest more money in R and D and also in emerging technologies.

● (1705)

Mr. Majid Jowhari: I have one last question on that topic. There was a narrowing down of the amount of funds from $15 billion to $10 billion. I'm sure that's focused on benefiting a lot of businesses.

Can you highlight one or two of those benefits as a result of this narrowing down?

Hon. Navdeep Bains: That's a narrowing down of...?

Mr. Majid Jowhari: It's the limitation of funds from $15 billion down to $10 billion.

Hon. Navdeep Bains: The benefit is that ultimately we want to see more activity. We want to see more competition. We want to see more businesses participate.

As you know, historically these funds have been allocated for two key sectors. They are important sectors. The aerospace sector is absolutely essential, and so is the auto sector. In my opinion, they'll continue to participate in an active way in this fund, but we've opened it up to different sectors as well.

We believe the criteria that we have in place really allow us to touch on key growth areas. For example, I was in Vancouver just a few weeks ago, on stem cell technologies, at a Canadian company. As you know, in the sixties we discovered stem cells. It's Canadian know-how, Canadian research, but now we're commercializing it. Our investment of $22.5 million will generate 800 new jobs. We're excited about those strategic investments. Again, that's above and beyond the traditional aero and auto, which are important, in an area where there's high growth. These are good-quality jobs, especially because these companies deploy strong IP strategies. On average they pay a 16% wage premium. Those are the kinds of middle-class jobs that we talk about, and those are the kinds of investments that we want to see more of.

Mr. Majid Jowhari: Thank you, Minister.

The Chair: Mr. Sheehan.

Mr. Terry Sheehan: Thank you very much, Minister.

In your presentation you talked about the innovation superclusters initiative, and we all know that it was oversubscribed. What tended to happen, at least in places like Sault Ste. Marie—and in other places, according to other MPs—is that you had businesses that were talking again that hadn't talked in a long time, or had never talked before, including with partners in colleges and universities.

My question to you, Minister, is that we're down to five, so what about all the other ideas that are out there? Will regional economic development agencies be able to play a part in partnering with some of those ideas? How is the funding for the regional economic development agencies in the 2018 budget, if you could describe that?

Hon. Navdeep Bains: Regional economic development agencies are really critical to our government's overall agenda, especially the economic agenda, because we want the benefits for the many, not just a few. This is not simply about urban Canada. We want to see rural and remote Canada succeed as well.

That's why we've brought the portfolios together. That's why we've elevated their importance. That's why we've had successive budgets of increasing funding for a lot of these regional development agencies.

You'll see that these estimates reflect the budget commitment going forward of previous 2017 increases, but as you saw in the last budget as well, we've increased the funding for regional development agencies by $511 million. The idea is to give them more resources to better coordinate with these initiatives. Whether it's the superclusters initiative, or the strategic innovation fund, or innovative solutions Canada—the programs I just briefly highlighted—the idea is that we want to break down those silos. That's why everything has come together in one department, to have better coordination, better alignment, and better opportunities, and again, to go above and beyond the traditional urban centres to really make sure that Canadians benefit. Twenty per cent of our population is outside urban Canada, and we want to make sure they succeed going forward in this new digital economy.

We're very confident that the additional funding for the regional development agencies will provide them with the resources to better coordinate with some of the initiatives that I highlighted.

● (1710)

Mr. Terry Sheehan: Thank you.

That's it.

The Chair: Thank you very much.

We're going to move to Ms. Rempel. You have five minutes, please.

Hon. Michelle Rempel: Great. Do do we have the numbers?

Hon. Navdeep Bains: Were you asking me how much of the total $7.8 billion goes to grants and contributions?

Hon. Michelle Rempel: No. For the period covered by these estimates, what was the total amount of direct contributions made to for-profit enterprises by all of the departments within your signing authority—not the $7.8 billion but the entire portfolio?

Hon. Navdeep Bains: All those make up the entire portfolio. I just wanted to make clear that we have the same premise.

Of that, $5.5 billion is attributed to direct grants and contributions for all the portfolios combined.

Hon. Michelle Rempel: That $5.5 billion is to for-profit enterprises?

Hon. Navdeep Bains: That's correct.

Hon. Michelle Rempel: How many full-time private sector jobs were created in that time period for that expenditure?

Hon. Navdeep Bains: We're getting the specific breakdown, but overall I would say definitely tens of thousands of jobs have been created.

I just highlighted an example—

Hon. Michelle Rempel: In what industries?

Hon. Navdeep Bains: In all industries, because—

Hon. Michelle Rempel: Call me skeptical. Do you have an exact number of jobs?

Hon. Navdeep Bains: No, we're working on that to get you the specific number, but I can tell you right now that the $5.5 billion has led to tens of thousands of jobs.

Hon. Michelle Rempel: Where?

Hon. Navdeep Bains: Across the economy.

Hon. Michelle Rempel: Where?

Hon. Navdeep Bains: Where do you want me to look?

Hon. Michelle Rempel: What industries? Where were those—

Hon. Navdeep Bains: Name me an industry.

Hon. Michelle Rempel: How many jobs were created, let's say, in Alberta, with the $5.5 billion?

Hon. Navdeep Bains: That's not an industry. That's a region.

Hon. Michelle Rempel: Okay, yes, but you asked me where, so—

Hon. Navdeep Bains: Since the last election, since 2015, over 600,000 jobs have been created in the Canadian economy, and the vast majority are full-time jobs.

Hon. Michelle Rempel: Yes, but I asked—

Hon. Navdeep Bains: In Alberta, if I may please complete my sentence, more than 50,000 jobs have been created.

Hon. Michelle Rempel: I don't think you're—

Hon. Navdeep Bains: You asked for Alberta.

Hon. Michelle Rempel: But I asked.... You spent $5.5 billion, and you gave that to companies. I'm asking you, from that money, how many jobs were created for which you can say, "I spent that money. Here is a job."

Hon. Navdeep Bains: As I said, if you want to look at the overall record, since we've formed government, over 600,000 jobs have been created—

Hon. Michelle Rempel: No, but—

Hon. Navdeep Bains: The vast majority are full-time.

Hon. Michelle Rempel: So the economy creates jobs, right?

Hon. Navdeep Bains: That's correct, and that's a great point you raise.

Hon. Michelle Rempel: So I'm asking—

Hon. Navdeep Bains: Let me highlight that point to you.

Hon. Michelle Rempel: No, I want an answer to my question.

Hon. Navdeep Bains: We make these investments—

Hon. Michelle Rempel: No, no. I want an answer to my question.

Hon. Navdeep Bains: It's not directly related to this. It's also leveraging private sector support as well.

Hon. Michelle Rempel: You said that the growth in the economy is not directly related to the $5.5 billion.

Hon. Navdeep Bains: This is partially. We create the conditions.

Hon. Michelle Rempel: How much? Where? You said tens of thousands.

Hon. Navdeep Bains: There were 50,000 jobs in Alberta.

Hon. Michelle Rempel: Were they directly related to the $5.5 billion?

Hon. Navdeep Bains: They were partly related to this, yes.

Hon. Michelle Rempel: How much was related directly?

Hon. Navdeep Bains: There's not one direct correlation. As you know, when a job is created there are many factors that come into play.

Hon. Michelle Rempel: I think for $5.5 billion we should be able to say—

Hon. Navdeep Bains: Companies make investment opportunities where they want to invest. Different levels of government, if they are looking at——

Hon. Michelle Rempel: How about this? Let's try this.

Hon. Navdeep Bains: Sure.

Hon. Michelle Rempel: For $372 million to Bombardier, how many jobs were created out of that?

Hon. Navdeep Bains: My understanding was 3,000.

Hon. Michelle Rempel: Those were full-time.

Hon. Navdeep Bains: Correct. Good-paying jobs that on average pay 60% more than the average industry-related—

Hon. Michelle Rempel: Were they directly related to the $372 million?

Hon. Navdeep Bains: Absolutely. That's exactly right. Yes. That's the aerospace sector.

Hon. Michelle Rempel: For the rest of the $5.5 billion, let's go back again. How many were created in Alberta?

Hon. Navdeep Bains: Again, as I mentioned to you it was 50,000.

Hon. Michelle Rempel: This is out of the $5.5 billion.

Hon. Navdeep Bains: Yes. We're getting those numbers for you. You know that. You wanted overall job numbers. Over 50,000 jobs have been created in Alberta since we formed the government.

Hon. Michelle Rempel: We're looking at main estimates and the $5.5 billion to private companies. You won't tell me how much—

Hon. Navdeep Bains: No, I'm not saying I won't tell you. You're asking this based on geography and number, and we will get you that number. I'm not saying we don't want to share that number, but you're asking it to be sliced a different way. Based on the investments we make, how does it impact a certain region? We will definitely get you that number just as we got you the grants and contributions number.

Hon. Michelle Rempel: Okay. So for the superclusters—

Hon. Navdeep Bains: We're very open and very transparent.

Hon. Michelle Rempel: How many jobs have been created in Alberta for the supercluster?

Hon. Navdeep Bains: We're just finalizing the contribution agreement so it's tough to say today exactly how many jobs have been created. Based on the business plan, I can tell you right now over 50,000 jobs will be created.

Hon. Michelle Rempel: Where?

Hon. Navdeep Bains: Across the country.... These are platforms. For example, artificial intelligence impacts retail, oil and gas, farming, agriculture. It impacts aerospace, auto—

Hon. Michelle Rempel: But looking at my province, you sign off for a lot of different——

Hon. Navdeep Bains: I'm just saying those jobs are created on the entire economy now.

Hon. Michelle Rempel: But you couldn't tell people in Alberta how many jobs would be created?

Hon. Navdeep Bains: Fifty thousand jobs have been created in Alberta since we formed the government.

Hon. Michelle Rempel: For $5.5 billion, is that directly related to that?

Hon. Navdeep Bains: That's part of our strategy. Grants and contributions aren't the only thing we do as a government to support the economy.

Hon. Michelle Rempel: Let's do substractive—

● (1715)

Hon. Navdeep Bains: For example, BDC, when Alberta went through a difficult time—

Hon. Michelle Rempel: How many of those 50,000 jobs were created by people who didn't get any money from you?

Hon. Navdeep Bains: What do you mean by "didn't get any money from you"?

Hon. Michelle Rempel: If a company created a job, I'm assuming it would be included in that figure.

Hon. Navdeep Bains: Our job is to create the conditions for success for business. Sometimes there's a direct correlation. Sometimes an indirect correlation. Our policies in general have created an environment where we have record GDP growth and record job creation, and a historic low unemployment rate of 5.8%.

Hon. Michelle Rempel: I will ask a different way.

The Chair: I hate to cut you off, but we are out of time.

We're going to move to Mr. Graham. You have five minutes, please.

Mr. David de Burgh Graham (Laurentides—Labelle, Lib.): Thank you, Minister.

I think along the same line we've actually seen, in my area, us go from a shortage of jobs to a shortage of workers so something is working. I appreciate that.

Mr. Frank Baylis: Way to go.

Mr. David de Burgh Graham: I want to thank you also for the tremendous work you have been doing in helping us get rural Canada off of our heavy reliance on smoke signals and carrier pigeons for Internet, what you might know as dial-up and satellite.

We spent years on what I call "innovating to connect". My own home relies on a low-reliability, low-speed relayed wireless system. It goes from one lake to the next lake to a house that connects to a cable system. Eventually sometimes you have Internet. It's pretty awesome.

I want to thank you for the comments you made to Mr. Masse regarding connect to innovate. For me it's a very visionary program. Do you have more comments after what you said to him on connect to innovate before I dive into some of the related topics?

Hon. Navdeep Bains: The vision is very clear. We want to break that digital divide. We think investments in high-speed Internet in rural and remote communities is almost a matter of life and death in some cases. It's absolutely essential for businesses that want to go online and grow. It's essential for those who want to get a world-class education. It's essential for some communities when it comes to health care. There are so many important aspects to bridging that digital divide. That's why we were very proud of introducing this program. This is a meaningful first step. We want to continue to do more. We look forward to your thoughts and ideas on that.

Mr. David de Burgh Graham: I have tons.

You mentioned the digital divide. I think that's a really important point. One aspect you talk about a whole lot less is the cellphone service. In rural Canada, it's dire, at least in my riding. Rural cellphone service is as dire as Internet service.

Are you looking for creative new solutions to solve this rather less discussed aspect of the digital divide?

Hon. Navdeep Bains: I think one of the advantages of the connect to innovate program, for example, is that it provides that fibre backbone infrastructure, which is helpful for cellphone towers. We think the issue you raise right there is connected to that program as well. We believe in many cases that this fibre backbone infrastructure will allow for those cell towers to be established, which will deal with that issue as well.

We recognize there are other mechanisms in place, other solutions that exist as well, and we're very open to that. I know you have played a leadership role in discussing those in caucus and in committee as well. Just like intellectual property, just like the study on broadband, just like the study you did on manufacturing, we really value the work that's done in this committee. It really helps shape a lot of our programs and policies.

Mr. David de Burgh Graham: I appreciate that.

There is a worldwide shortage of programmers. It's as bad as the worldwide shortage of pilots. When we say we're connecting to innovate, for me, solving the coder issue is a big part of the innovation part of that equation. It's inextricably tied to the visionary CanCode program. Can you bring us up to date in more detail on CanCode: where we are, how it improves inclusiveness, how it's going to get a new generation to understand technology, and how the money is being spent? How are your own coding lessons going?

Hon. Navdeep Bains: I'm still a bit challenged with my coding. These young kids can outmanoeuvre me all the time.

I was in Mississauga last week announcing a specific program, code:mobile, for this initiative where a fleet is purchased to allow different vehicles to help kids code in places across the country.

Overall, the program objective is very simple: one million kids will learn how to code. This is a $50-million program. Sixty thousand teachers will also get tools to help students better learn coding. This is not simply about coding. It's about digital literacy and digital skills. It's about making sure that young people have the tools they need to succeed in the new digital economy.

This investment is also strengthening our domestic pipeline. Many of the jobs that will be created will be related to coding and STEM—science, technology, engineering, and mathematics—but we have specific targets around more girls learning how to code. In the past, for example, 38% of graduates from STEM programs were women, but if you look at STEM-related jobs, it's only 21%. We can and must do a better job of, not only attracting more women into the STEM-related fields but making sure that they stay in those fields, because those are better-paying jobs, and there's high-growth opportunities in those areas as well. That's why coding is designed to also focus on indigenous populations. In the past they might not have necessarily had those opportunities. We're very thoughtful of being more inclusive in some of our programs.

● (1720)

Mr. David de Burgh Graham: Thank you for your leadership on this.

I'm out of time.

The Chair: Thank you very much.

We're going to move to Mr. Lloyd.

You have three minutes.

Mr. Dane Lloyd (Sturgeon River—Parkland, CPC): Thank you, Mr. Chair.

Thank you, Minister Bains and Mr. Knubley, for coming in. I want to say for the record that we have your agreement that you will be tabling the information on how much of the funding from the $5.5 billion will be going towards Alberta companies and how many direct jobs that would create.

Going into my question, Minister Bains, you're in charge of the proposed takeover of Aecon by Chinese state-owned China Communications and Construction Company, which, in my opinion, represents a threat to the viability of small and medium-sized enterprises. For example, they recently bid on a Sampson Cree water plant and left about a million dollars on the table underbidding Canadian companies. This poses a real threat to the construction centre.

Have you as minister undertaken to assess the impact of Aecon's takeover by a Chinese state-owned enterprise on small and medium-sized enterprises in Canada?

Hon. Navdeep Bains: As you know, I'm the minister responsible for the Investment Canada Act. Under that, I have a responsibility to do a thorough net economic benefit analysis. The issues you raised would be under my purview, and those are the things we would analyze.

There are two dimensions to this. There is the economic benefit and the test and the analysis that needs to be done. As you know, all such transactions are subject to a national security review. This is a multi-step process that exists. I work very closely with Minister Goodale and our security intelligence agencies—

Mr. Dane Lloyd: But on the economic impact aspect, what did you find? What were the results of that impact—

Hon. Navdeep Bains: As of right now, we're still going through the process of doing our due diligence. It is a rigorous and robust process. We haven't made any final determination at this moment.

Mr. Dane Lloyd: We've known for months that this takeover is happening, so do you have any idea what the impact—

Hon. Navdeep Bains: I have lots of ideas and I have lots of information, but at this moment I'm not in a position to share it, not until we complete our due diligence. I don't want to speculate on anything until we make a final determination, but I can assure you that Canada's national economic interest will always guide our decision-making. It always has in the past and will continue to do so going forward.

Mr. Dane Lloyd: Former CSIS director, Ward Alcock, has stated recently that the proposed takeover of Aecon is a threat to our national security. Furthermore, this takeover would limit opportunities to co-operate with our largest trading partner, the United States. We've seen that with the Gordie Howe bridge project that's coming up.

Do you believe that this takeover is in Canada's best interest?

Hon. Navdeep Bains: We're going through that analysis right now. I respect experts and their opinions, and I have a great deal of confidence in the current experts we have, the current head of CSIS, the current head of the RCMP and other security agencies. I value their advice and feedback. I've always listened to their advice and feedback, and I follow their advice. As I've stated in the House of Commons, I'll state here unequivocally that we never have and never will compromise on national security. We'll make sure we do our proper due diligence before we render any decision and go public with it.

Mr. Dane Lloyd: It's an interesting statement, because we have the recent case of the Norsat satellite company that was sold without a national security review. How can you say that you take national security seriously when a satellite company wasn't even subject to a national security review?

The Chair: Answer very quickly, please.

Hon. Navdeep Bains: Every review is subject to a national security multi-step process. That process is always followed. As I said, I've always followed the advice of our national security officials.

The Chair: Thank you very much.

We're going to move to Mr. Baylis. You have a very quick three minutes.

Mr. Frank Baylis: Okay, thank you, Chair.

Thank you, Minister Bains, for being here.

The innovation economy that you've been working so heavily on is ultimately based on intellectual property, so I was really very happy to see the announcements that were made last week on our innovation strategy related specifically to intellectual property. I noted that a lot of the points that you brought up stemmed from the reports of this committee, so I want to thank you for that. I think the experts who testified appreciated that.

Can you talk to us about the IP marketplace? This is one of the cornerstones of what you announced. Can you explain that a bit more?

Hon. Navdeep Bains: You're right. This is the first national IP strategy that the federal government has deployed. In a new knowledge economy, it was long overdue, and I want to thank you again for your work.

As you know, there is $85.3 million associated with this strategy as well, so it has substantial resources deployed. There are three components to it. One, of course, is around IP literacy, which is really important, particularly, small businesses and IP. Only 9% actually have an IP strategy, and only 10% actually own IP, so this is a real challenge for us. Even if you look at the context in the U.S. for the S&P 500, 84% of their assets are attributed to IP, while for the TSX top 30, it's only 40%. We're really behind in the IP game relative to our U.S. peers.

We brought different provisions. We looked at trolls and bad behaviour. We brought a patent collective forward as well, to deal with issues and to provide better resources to deal with—again—those bad actors.

The IP marketplace is a great initiative that this committee highlighted. It really is a one-stop shop for businesses, to be able to determine the different patents that exist in a more clear and concise way and to see how they can better leverage it in their own business. Also, those patent holders are in a position to then get better licensing, revenue, and fees out of their patents as well.

● (1725)

Mr. Frank Baylis: Let's facilitate that.

Hon. Navdeep Bains: That's exactly it. The whole idea is to be that one-stop shop, a marketplace for patent holders that really allows businesses, academia, and IP patent holders to work together.

Mr. Frank Baylis: Another point that was brought up through our consultations was the need to help our small and medium-sized businesses become more IP literate, to really bring them up a bit. I saw that there's a great initiative on that front. Can you elaborate on what you're doing specifically to help the small and medium-sized businesses become more literate, with stronger IP?

Hon. Navdeep Bains: The Canadian Intellectual Property Office, CIPO, is going to provide additional resources for training. We're going to have IP legal clinics. We're very mindful of that. We recognize that small businesses, in particular, need to have a strategy when it comes to IP. They don't fully appreciate it, and what happens is that these trolls or bad actors come and can undermine their business by extorting money for the IP that they didn't patent, for example.

The Chair: I'm going to have to cut you off—sorry.

Hon. Navdeep Bains: The bottom line is that there is a comprehensive program to promote literacy and tools for businesses to create a strong business strategy for IP.

Mr. Frank Baylis: Thank you, Minister.

The Chair: Thank you very much. We notice the bells are going off. I would like unanimous consent so that Mr. Masse gets his final two minutes.

All right. Thank you.

Mr. Masse, take it home for the final two minutes.

Mr. Brian Masse: Thank you. With that, I of course have to ask about my local community, but it is a national issue, and that's the Gordie Howe bridge. It was raised in regard to Aecon and the Investment Canada Act. We have SNC-Lavalin, which is under criminal investigation, as the second of three bidders, and then there's a third one.

Is there any concern, or is there a backup plan with regard to...? We're going into the June selection of the preferred candidate of those three groups. One's involved in an Investment Canada review. The second one's under criminal investigation. For the third one, we don't know of anything yet, problem-wise, but is there a backup plan with regard to this process?

Hon. Navdeep Bains: My understanding is that the process is well under way. We've been very clear about our support for the bridge. I'm not aware of a plan B, plan C, or plan E right now. I know that they're going through a competitive bidding process.

When it comes to Aecon, for example, we're going to do our proper due diligence in terms of the acquisition that's being discussed under the Investment Canada Act, but we are very supportive, as you know, of the Gordie Howe bridge initiative, and right now they're going through the bidding process.

Mr. Brian Masse: Last, an order in council was provided for the Ambassador Bridge, owned by Matty Moroun, a private American billionaire.

My question is why. It is destroying my Sandwich Town community, which is adjacent to it, and there were no community benefits that were provided. This is a serious situation. Why were no community benefits provided for in that order in council?

Hon. Navdeep Bains: I can get back to you on that. I appreciate your raising that issue. That is not the objective. We want to make sure we get the Gordie Howe bridge built. We recognize the challenges right now with the Ambassador Bridge as well. That's why we support the Gordie Howe bridge, but specific to this order in council, we can get back to you on that and determine what next steps we can take.

Mr. Brian Masse: That's fair enough. Thank you.

The Chair: All right.

Thank you, Minister, for being here.

I will remind everybody that on Thursday we are in camera for the first hour discussing travel, and for the second hour we will have Minister Chagger.

Thank you, everybody.

The meeting is adjourned for the day.

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